



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Division**

**Processed
Products
Branch**

United States Standards for Grades of Frozen Squash (Summer Type)

Effective date April 3, 1953

This is the first issue of the United States Standards for Grades of Frozen Squash (Summer Type) published in the **FEDERAL REGISTER** of March 3, 1953 (18 FR 1182) to become effective April 3, 1953.

Voluntary U.S. grade standards are issued under the authority of the Agricultural Marketing Act of 1946, which provides for the development of official U.S. grades to designate different levels of quality. These grade standards are available for use by producers, suppliers, buyers, and consumers. As in the case of other standards for grades of processed fruits and vegetables, these standards are designed to facilitate orderly marketing by providing a convenient basis for buying and selling, for establishing quality control programs, and for determining loan values.

The standards also serve as a basis for the inspection and grading of commodities by the Federal inspection service, the only activity authorized to approve the designation of U.S. grades as referenced in the standards, as provided under the Agricultural Marketing Act of 1946. This service, available as on-line (in-plant) or lot inspection and grading of all processed fruit and vegetable products, is offered to interested parties, upon application, on a fee-for-service basis. The verification of some specific recommendations, requirements, or tolerances contained in the standards can be accomplished only by the use of on-line inspection procedures. In all instances, a grade can be assigned based on final product factors or characteristics.

In addition to the U.S. grade standards, grading manuals or instructions for inspection of several processed fruits and vegetables are available upon request for a nominal fee. These manuals or instructions contain detailed interpretations of the grade standards and provide step-by-step procedures for grading the product.

Grade standards are issued by the Department after careful consideration of all data and views submitted, and the Department welcomes suggestions which might aid in improving the standards in future revisions. Comments may be submitted to, and copies of standards and grading manuals obtained from:

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United States Standards for Grades of Frozen Squash (Summer Type)

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Authority:	Agricultural Marketing Act of 1946, Secs. 203, 205, 60 Stat. 1087, as amended, 1090, as amended (7 U.S.C. 1622, 1624).

Note: Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and regulations.

§52.1961 Product description.

Frozen squash is the fresh, sound, immature product from the squash (summer type) plant hereinafter called frozen squash, which has been properly prepared and properly blanched, and is then frozen in accordance with good commercial practice and maintained at temperatures necessary for the preservation of the product.

§52.1962 Styles of frozen squash.

(a) **Sliced.**

(b) **Cut.**

§52.1963 Grades of frozen summer squash.

(a) **U.S. Grade A or U.S. Fancy** is the quality of frozen squash that possesses similar varietal characteristics; that possesses a good flavor and odor; that possesses a good color; that is practically free from defects; that possesses a good character; and that scores not less than 85 points when scored in accordance with the scoring system outlined in this subpart.

(b) **U.S. Grade B or U.S. Extra Standard** is the quality of frozen squash that possesses similar varietal characteristics; that possesses a reasonably good flavor and odor; that possesses a reasonably good color; that is reasonably free from defects; that possesses a reasonably good character; and that scores not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

(c) **Substandard** is the quality of frozen squash that fails to meet the requirements of U.S. Grade B or U.S. Extra Standard.

§52.1964 Ascertaining the grade.

(a) The grade of frozen squash may be ascertained by considering, in conjunction with the requirements of the respective grade, the respective ratings for the factors of color, absence of defects, and character.

(b) The relative importance of each scoring factor is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	20
Absence of defects	40
Character	<u>40</u>
Total Score	100

- (c) The scores for the factors of color, absence of defects, and character are determined immediately after thawing so that the product is sufficiently free from ice crystals to permit proper handling as individual units, and a representative sample of the product is cooked to ascertain tenderness of the frozen squash before final evaluation of the score for character. Flavor and odor are also ascertained on the cooked product.
- (d) **Good flavor and odor** means that the product after cooking has a good, characteristic normal flavor and odor and is free from objectionable odors of any kind.
- (e) **Reasonably good flavor and odor** means that the product after cooking may be lacking in good flavor and odor but is free from objectionable flavors and objectionable odors of any kind.

§52.1965 Ascertaining the ratings for the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, **17 to 20 points** means 17, 18, 19, or 20 points).

§52.1966 Color.

- (a) **"A" classification.** Frozen squash that possesses a good color may be given a score of 17 to 20 points. **Good color** means that the color of the squash is bright and typical of young and tender squash of similar varietal characteristics which has been properly processed.
- (b) **"B" classification.** If the frozen squash possesses a reasonably good color, a score of 14 to 16 points may be given. Frozen squash that falls into this classification shall not be graded above U.S. Grade B or U.S. Extra Standard, regardless of the total score for the product (this is a limiting rule). **Reasonably good color** means that the color of the squash is typical of reasonably young and tender squash of similar varietal characteristics which has been properly processed.

- (c) **"SStd" classification.** Frozen squash that fails to meet the requirements of paragraph (b) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.1967 Absence of defects.

- (a) **General.** The factor of absence of defects refers to the degree of freedom from harmless extraneous vegetable material, sand, grit, or silt, poorly cut units, units damaged by mechanical injury, and units damaged by discoloration, scars, insect injury, or damaged by other means.

- (1) **Unit** means a whole squash or a portion of a squash.
- (2) **Damaged unit** means any unit damaged by discoloration, scars, insect injury, or by any other means except damaged by mechanical injury to the extent that the appearance or eating quality of the product is materially affected.
- (3) **Seriously damaged** means damaged to the extent that the appearance or eating quality of the unit is seriously affected.
- (4) **Harmless extraneous vegetable material** means leaves, detached stems or portions thereof, or other similar vegetable material.
- (5) **Poorly cut** means units with attached stems or stem material, very ragged units, or pieces of less than 1/2 slice in sliced style squash.
- (6) **Damaged by mechanical injury** means broken or mashed to such an extent that the appearance or eating quality of the unit is seriously affected.
- (7) **Sand, grit, or silt** means any particle of earthy material.

- (b) **"A" classification.** Frozen squash that is practically free from defects may be given a score of 34 to 40 points. **Practically free from defects** means that the product contains no grit, sand, or silt that affects the eating quality or appearance of the frozen squash; that for each 12 ounces of units there may be present not more than one piece of harmless extraneous vegetable material. The combined weight of all other defects and defective units must not exceed 8 percent of the weight of the units: **Provided,** That

- (1) Not more than 4 percent, by weight, is of damaged units and of such 4 percent, not more than one-fourth thereof or 1 percent, by weight, of all the units consist of units that are seriously damaged; or

- (2) Not more than 6 percent, by weight, is of poorly cut units, or of units damaged by mechanical injury, or any combination thereof of not more than 6 percent, by weight.
- (c) **"B" classification.** If the frozen squash is reasonably free from defects, a score of 28 to 33 points may be given. Frozen squash that falls into this classification shall not be graded above U.S. Grade B or U.S. Extra Standard, regardless of the total score for the product (this is a limiting rule). **Reasonably free from defects** means that the product may contain a trace of sand, grit, or silt that does not materially affect the eating quality or appearance of the frozen squash; that for each 12 ounces of units there may be present not more than two pieces of harmless extraneous vegetable material. The combined weight of all other defects and defective units must not exceed 12 percent of the weight of the units: **Provided, That**
 - (1) Not more than 8 percent, by weight, is of damaged units and of such 8 percent, not more than one-fourth thereof or 2 percent, by weight, of all the units consist of units that are seriously damaged.
 - (2) Not more than 10 percent, by weight, is of poorly cut units, or of units damaged by mechanical injury, or any combination thereof of not more than 10 percent, by weight.
- (d) **"SStd" classification.** Frozen squash that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.1968 Character.

- (a) **General.** The factor of character refers to the fleshy texture, the tenderness, and the degree of development of the seeds.
- (b) **"A" classification.** Frozen squash that possesses a good character may be given a score of 34 to 40 points. **Good character** means that the units are practically intact, are fleshy and tender, that the seeds are in the immature stage, and that not more than 5 percent, by weight of the units may be of reasonably good character.

- (c) **"B" classification.** If the frozen squash possesses a reasonably good character, a score of 28 to 33 points may be given. Frozen squash that falls into this classification shall not be graded above U.S. Grade B or U.S. Extra Standard, regardless of the total score for the product (this is a limiting rule). **Reasonably good character** means that the units may show slight disintegration, may have lost to a considerable extent their fleshy texture, may be reasonably tender, and that the seeds may have passed the immature stage of maturity, but are not hard and that not more than 10 percent, by weight, of the units fails to meet the requirements for reasonably good character.
- (d) **"SStd" classification.** Frozen squash that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.1969 Ascertaining the grade of a lot.

The grade of a lot of Frozen Squash (Summer Type) covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 52.1 to 52.83).

§52.1970 Score sheet for frozen squash (summer type).

Size and kind of container			
Container marks or identification			
Label			
Net weight (ounces)			
Style (whole, sliced, cut)			
Factors		Score Points	
Color	20	"A"	17-20
		"B"	14-16 <u>1/</u>
		"SStd"	0-13 <u>1/</u>
Absence of defects	40	"A"	34-40
		"B"	28-33 <u>1/</u>
		"SStd"	0-27 <u>1/</u>
Character	40	"A"	34-40
		"B"	28-33 <u>1/</u>
		"SStd"	0-27 <u>1/</u>
Total Score	100		
Flavor and odor			
Grade			

1/ Indicates limiting rule

Recodified in the Federal Register of December 9, 1953 (18 F.R. 8058)